

# FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO

Luminant Generation Company LLC  
AUTHORIZING THE OPERATION OF  
DeCordova Steam Electric Station  
Electric Services  
LOCATED AT

Hood County, Texas

Latitude 32° 24' 12" Longitude 97° 25' 11"

Regulated Entity Number: RN100664812

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site and emission units listed in this permit. Operations of the site and emission units listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site and emission units authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site and emission units.

Permit No:   O47   Issuance Date:   March 18, 2011  

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For the Commission

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## **General Terms and Conditions**

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit, except for reports required solely by the Acid Rain permit or the Clean Air Interstate Rule permit, unless they are being used to demonstrate compliance with another requirement, must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

### **Special Terms and Conditions: Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting**

1. Permit holder shall comply with the following requirements:
  - A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.
  - B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is

not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.

- C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.
- D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.
- E. Emission units subject to 40 CFR Part 63, Subpart ZZZZ as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, §113.1090 which incorporates the 40 CFR Part 63 Subpart by reference.
- F. The permit holder shall comply with the following 30 TAC Chapter 101, Subchapter H, Division 2 (Emissions Banking and Trading of Allowances) Requirements for an electric generating facility authorized under 30 TAC Chapter 116, Subchapter I:
  - (i) Title 30 TAC § 101.332 (relating to General Provisions)
  - (ii) Title 30 TAC § 101.333 (relating to Allocation of Allowances)
  - (iii) Title 30 TAC § 101.334 (relating to Allowance Deductions)
  - (iv) Title 30 TAC § 101.335 (relating to Allowance Banking and Trading)
  - (v) Title 30 TAC § 101.336 (relating to Emission Monitoring and Compliance Demonstration and Reporting)
  - (vi) The terms and conditions by which the emission limits are established to meet the quantity of allowances for the electric generating facility are applicable requirements of this permit
- G. For the purpose of generating discrete emission reduction credits through 30 TAC Chapter 101, Subchapter H, Division 4 (Discrete Emission Credit Banking and Trading), the permit holder shall comply with the following requirements:
  - (i) Title 30 TAC § 101.372 (relating to General Provisions)
  - (ii) Title 30 TAC § 101.373 (relating to Discrete Emission Reduction Credit Generation and Certification)

- (iii) Title 30 TAC § 101.374 (relating to Mobile Discrete Emission Reduction Credit Generation and Certification)
  - (iv) Title 30 TAC § 101.378 (relating to Discrete Emission Credit Banking and Trading)
  - (v) The terms and conditions by which the emission limits are established to generate the discrete reduction credit are applicable requirements of this permit
- 2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):
  - A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements
  - B. Title 30 TAC § 101.3 (relating to Circumvention)
  - C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ
  - D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ
  - E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)
  - F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)
  - G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)
  - H. Title 30 TAC § 101.221 (relating to Operational Requirements)
  - I. Title 30 TAC § 101.222 (relating to Demonstrations)
  - J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)
- 3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:
  - A. Visible emissions from stationary vents that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1, shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:

- (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)
- (ii) Title 30 TAC § 111.111(a)(1)(E)
- (iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)
- (iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO<sub>x</sub>, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the “Applicable Requirements Summary” attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:
  - (1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.
  - (2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.
  - (3) Records of all observations shall be maintained.
  - (4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible

emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(5) Compliance Certification:

- (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).
- (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

- (c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.
- B. For visible emissions from a building, enclosed facility, or other structure; the permit holder shall comply with the following requirements:
  - (i) Title 30 TAC § 111.111(a)(7)(A) (relating to Requirements for Specified Sources)
  - (ii) Title 30 TAC § 111.111(a)(7)(B)(i) or (ii)
  - (iii) For a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source subject to 30 TAC § 111.111(a)(7)(A), complying with 30 TAC § 111.111(a)(7)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO<sub>x</sub>, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:
    - (1) An observation of visible emissions from a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source which is required to comply with 30 TAC § 111.111(a)(7)(A) shall be conducted at least once during each calendar quarter unless the air emission source or enclosed facility is not operating for the entire quarter.
    - (2) Records of all observations shall be maintained.
    - (3) Visible emissions observations of air emission sources or enclosed facilities operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of air emission sources or enclosed facilities operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each emissions outlet in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each emissions outlet during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions



outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(4) Compliance Certification:

- (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(7) and (a)(7)(A)
- (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(7)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. . If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader

C. For visible emissions from all other sources not specified in 30 TAC § 111.111(a)(1), (4), or (7); the permit holder shall comply with the following requirements:

- (i) Title 30 TAC § 111.111(a)(8)(A) (relating to Requirements for Specified Sources)
- (ii) Title 30 TAC § 111.111(a)(8)(B)(i) or (ii)
- (iii) For a source subject to 30 TAC § 111.111(a)(8)(A), complying with 30 TAC § 111.111(a)(8)(B)(i) or (ii), and capable of producing visible

emissions from, but not limited to, particulate matter, acid gases and NO<sub>x</sub>, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:

- (1) An observation of visible emissions from a source which is required to comply with 30 TAC § 111.111(a)(8)(A) shall be conducted at least once during each calendar quarter unless the source is not operating for the entire quarter.
- (2) Records of all observations shall be maintained.
- (3) Visible emissions observations of sources operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of sources operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each source in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each source during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
- (4) Compliance Certification:
  - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(8) and (a)(8)(A)
  - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(8)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance

with the opacity requirements. . If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

- D. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.
- E. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).
- F. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:
  - (i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)
  - (ii) Sources with an effective stack height ( $h_e$ ) less than the standard effective stack height ( $H_e$ ), must reduce the allowable emission level by multiplying it by  $[h_e/H_e]^2$  as required in 30 TAC § 111.151(b)
  - (iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)
- G. Outdoor burning, as stated in 30 TAC § 111.201, shall not be authorized unless the following requirements are satisfied:
  - (i) Title 30 TAC § 111.205 (relating to Exception for Fire Training)
  - (ii) Title 30 TAC § 111.207 (relating to Exception for Recreation, Ceremony, Cooking, and Warmth)
  - (iii) Title 30 TAC § 111.209 (relating to Exception for Disposal Fires)

- (iv) Title 30 TAC § 111.211 (relating to Exception for Prescribed Burn)
  - (v) Title 30 TAC § 111.213 (relating to Exception for Hydrocarbon Burning)
  - (vi) Title 30 TAC § 111.219 (relating to General Requirements for Allowable Outdoor Burning)
  - (vii) Title 30 TAC § 111.221 (relating to Responsibility for Consequences of Outdoor Burning)
- 4. Permit holder shall comply with the following 30 TAC Chapter 115, Subchapter C requirements:
  - A. When filling stationary gasoline storage containers with a nominal capacity less than or equal to 1,000 gallons at a Stage I motor vehicle fuel dispensing facility, the permit holder shall comply with the following requirements specified in 30 TAC Chapter 115, Subchapter C:
    - (i) Title 30 TAC § 115.222(7) (relating to Control Requirements)
    - (ii) Title 30 TAC § 115.222(3), as it applies to liquid gasoline leaks
    - (iii) Title 30 TAC § 115.224(1) (relating to Inspection Requirements), as it applies to liquid gasoline leaks
- 5. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:
  - A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)
  - B. Title 40 CFR § 60.8 (relating to Performance Tests)
  - C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)
  - D. Title 40 CFR § 60.12 (relating to Circumvention)
  - E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)
  - F. Title 40 CFR § 60.14 (relating to Modification)
  - G. Title 40 CFR § 60.15 (relating to Reconstruction)
  - H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)

6. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.
7. For each gasoline dispensing facility, with a throughput of less than 10,000 gallons per month as specified in 40 CFR Part 63, Subpart CCCCCC, the permit holder shall comply with the following requirements (Title 30 TAC, Subchapter C, § 113.1380 incorporated by reference):
  - A. Title 40 CFR § 63.11111(e), for records of monthly throughput
  - B. Title 40 CFR § 63.11111(i), for compliance due to increase of throughput
  - C. Title 40 CFR § 63.11113(c), for compliance due to increase of throughput
  - D. Title 40 CFR § 63.11115(a), for operation of the source
  - E. Title 40 CFR § 63.11116(a) and (a)(1) - (4), for work practices
  - F. Title 40 CFR § 63.11116(b), for records availability
  - G. Title 40 CFR § 63.11116(d), for portable gasoline containers

#### **Additional Monitoring Requirements**

8. Unless otherwise specified, the permit holder shall comply with the compliance assurance monitoring requirements as specified in the attached “CAM Summary” upon issuance of the permit. In addition, the permit holder shall comply with the following:
  - A. The permit holder shall comply with the terms and conditions contained in 30 TAC § 122.147 (General Terms and Conditions for Compliance Assurance Monitoring).
  - B. The permit holder shall report, consistent with the averaging time identified in the “CAM Summary,” deviations as defined by the deviation limit in the “CAM Summary.” Any monitoring data below a minimum limit or above a maximum limit, that is collected in accordance with the requirements specified in 40 CFR § 64.7(c), shall be reported as a deviation. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).
  - C. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the “CAM Summary,” for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances in order to avoid reporting deviations. All monitoring data shall

be collected in accordance with the requirements specified in 40 CFR § 64.7(c).

- D. The permit holder shall operate the monitoring, identified in the attached “CAM Summary,” in accordance with the provisions of 40 CFR § 64.7.
9. The permit holder shall comply with the periodic monitoring requirements as specified in the attached “Periodic Monitoring Summary” upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the “Periodic Monitoring Summary,” for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

#### **New Source Review Authorization Requirements**

10. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:
- A. Are incorporated by reference into this permit as applicable requirements
  - B. Shall be located with this operating permit
  - C. Are not eligible for a permit shield
11. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.
12. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit’s compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, material safety data sheets (MSDS),

chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

## **Compliance Requirements**

13. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.
14. Permit holder shall comply with the following 30 TAC Chapter 117 requirements:
  - A. The permit holder shall comply with the compliance schedule as required in 30 TAC § 117.9300 for electric utilities in East and Central Texas.
15. Use of Discrete Emission Credits to comply with the applicable requirements:
  - A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:
    - (i) Title 30 TAC Chapter 115
    - (ii) Title 30 TAC Chapter 117
    - (iii) If applicable, offsets for Title 30 TAC Chapter 116
    - (iv) Temporarily exceed state NSR permit allowables
  - B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:
    - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)
    - (ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4

- (iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)
  - (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122
  - (v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)
- 16. The permit holder may comply with the following 30 TAC Chapter 101, Subchapter H, Division 5 (System Cap Trading) Requirements for an electric generating facility participating in a system cap:
  - A. Title 30 TAC § 101.383 (relating to General Provisions)
  - B. Title 30 TAC § 101.385 (relating to Recordkeeping and Reporting)

### **Protection of Stratospheric Ozone**

- 17. Permit holders at a site subject to Title VI of the FCAA Amendments shall meet the following requirements for protection of stratospheric ozone.
  - A. Any on site servicing, maintenance, and repair on refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants or non-exempt substitutes shall be conducted in accordance with 40 CFR Part 82, Subpart F. Permit holder shall ensure that regulated repairs or refrigerant removal are performed only by persons who meet the technician certification requirements of 40 CFR 82.161(a). Records shall be maintained as required by 40 CFR Part 82, Subpart F.
  - B. The permit holder shall comply with 40 CFR Part 82, Subpart H related to Halon Emissions Reduction requirements as specified in 40 CFR § 82.250 - § 82.270 and the applicable Part 82 Appendices.

### **Temporary Fuel Shortages (30 TAC § 112.15)**

- 18. The permit holder shall comply with the following 30 TAC Chapter 112 requirements:
  - A. Title 30 TAC § 112.15 (relating to Temporary Fuel Shortage Plan Filing Requirements)
  - B. Title 30 TAC § 112.16(a), (a)(1), and (a)(2)(B) - (C) (relating to Temporary Fuel Shortage Plan Operating Requirements)
  - C. Title 30 TAC § 112.17 (relating to Temporary Fuel Shortage Plan Notification Procedures)



- D. Title 30 TAC § 112.18 (relating to Temporary Fuel Shortage Plan Reporting Requirements)

### **Alternative Requirements**

19. The permit holder shall comply with the approved alternative means of control (AMOC); alternative monitoring, recordkeeping, or reporting requirements; or requirements determined to be equivalent to an otherwise applicable requirement contained in the Alternative Requirements attachment of this permit. Units complying with an approved alternative requirement have reference to the approval in the Applicable Requirements summary listing for the unit. The permit holder shall maintain the original documentation, from the EPA Administrator, demonstrating the method or limitation utilized. Documentation shall be maintained and made available in accordance with 30 TAC § 122.144.

### **Permit Location**

20. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

### **Acid Rain Unit Exemptions**

21. As reference only information, unit DC-B1 (identified in the Certificate of Representation as Unit 1), has received acid rain unit exemptions and is not incorporated into the Acid Rain Permit.

### **Clean Air Interstate Rule Permit Requirements**

22. For units DC-CT1, DC-CT2, DC-CT3 and DC-CT4 (identified in the Certificate of Representation as Units CT1, CT2, CT3 and CT4, respectively), located at the site identified by ORIS/Facility code (8063), the designated representative and the owner or operator, as applicable, shall comply with the following Clean Air Interstate Rule (CAIR) Permit requirements. Until approval of the Texas CAIR SIP, the permit holder shall comply with the equivalent requirements of 40 CFR Part 97 in place of the referenced 40 CFR Part 96 requirements in the Texas CAIR permit and 30 TAC Chapter 122 requirements.

#### **A. General Requirements**

- (i) Under 30 TAC § 122.420(b) and 40 CFR §§ 96.120(b) and 96.220(b) the CAIR Permit requirements contained here are a separable portion of the Federal Operating Permit (FOP).
- (ii) The owners and operators of the CAIR NO<sub>x</sub> and the CAIR SO<sub>2</sub> source shall operate the source and the unit in compliance with the requirements of this CAIR permit and all other applicable State and federal requirements.

- (iii) The owners and operators of the CAIR NO<sub>x</sub> and the CAIR SO<sub>2</sub> source shall comply with the General Terms and Conditions of the FOP that incorporates this CAIR Permit.
- (iv) The term for the initial CAIR permit shall commence with the issuance of the revision containing the CAIR permit and shall be the remaining term for the FOP that incorporates the CAIR permit. Renewal of the initial CAIR permit shall coincide with the renewal of the FOP that incorporates the CAIR permit and subsequent terms shall be no more than five years from the date of renewal of the FOP and run concurrent with the permit term of the FOP.

B. Monitoring and Reporting Requirements

- (i) The owners and operators, and the CAIR designated representative, of the CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements contained 40 CFR Part 96, Subpart HH.
- (ii) The owners and operators, and the CAIR designated representative, of the CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements contained 40 CFR Part 96, Subpart HHH.
- (iii) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HH and any other credible evidence shall be used to determine compliance by the CAIR NO<sub>x</sub> source with the CAIR NO<sub>x</sub> emissions limitation.
- (iv) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HHH and any other credible evidence shall be used to determine compliance by the CAIR SO<sub>2</sub> source with the CAIR SO<sub>2</sub> emissions limitation.

C. NO<sub>x</sub> emissions requirements

- (i) As of the allowance transfer deadline for a control period, the owners and operators of the CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source shall hold, in the source's compliance account, CAIR NO<sub>x</sub> allowances available for compliance deductions for the control period under 40 CFR § 96.154(a) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO<sub>x</sub> units at the source, as determined in accordance with the requirements of 40 CFR Part 96, Subpart HH.
- (ii) A CAIR NO<sub>x</sub> unit shall be subject to the requirements of paragraph C.(i) of this CAIR Permit starting on the later of January 1, 2009, or

the deadline for meeting the unit's monitor certification requirements under 40 CFR § 96.170(b)(1), (2), or (5).

- (iii) A CAIR NO<sub>x</sub> allowance shall not be deducted, for compliance with the requirements of this permit, for a control period in a calendar year before the year for which the CAIR NO<sub>x</sub> allowance was allocated.
- (iv) CAIR NO<sub>x</sub> allowances shall be held in, deducted from or transferred into or among CAIR NO<sub>x</sub> Allowance Tracking System accounts in accordance with the requirements of 40 CFR Part 96, Subpart FF or Subpart GG.
- (v) A CAIR NO<sub>x</sub> allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO<sub>x</sub> Annual Trading Program. No provision of the CAIR NO<sub>x</sub> Annual Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 40 CFR § 96.105 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.
- (vi) A CAIR NO<sub>x</sub> allowance does not constitute a property right.
- (vii) Upon recordation by the Administrator under 40 CFR Part 96, Subpart FF or Subpart GG, every allocation, transfer, or deduction of a CAIR NO<sub>x</sub> allowance to or from a CAIR NO<sub>x</sub> unit's compliance account is incorporated automatically in this CAIR permit.

D. NO<sub>x</sub> excess emissions requirement

- (i) If a CAIR NO<sub>x</sub> source emits nitrogen oxides during any control period in excess of the CAIR NO<sub>x</sub> emissions limitation, the owners and operators of the source and each CAIR NO<sub>x</sub> unit at the source shall surrender the CAIR NO<sub>x</sub> allowances required for deduction under 40 CFR § 96.154(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law.
- (ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AA, the Clean Air Act, and applicable State law.

E. SO<sub>2</sub> emissions requirements

- (i) As of the allowance transfer deadline for a control period, the owners and operators of the CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall hold, in the source's compliance account, CAIR SO<sub>2</sub> allowances available for compliance deductions for the

control period under 40 CFR § 96.254(a) and (b) in an amount not less than the tons of total sulfur dioxides emissions for the control period from all CAIR SO<sub>2</sub> units at the source, as determined in accordance with the requirements of 40 CFR Part 96, Subpart HHH.

- (ii) A CAIR SO<sub>2</sub> unit shall be subject to the requirements of paragraph E.(i) of this CAIR Permit starting on the later of January 1, 2010, or the deadline for meeting the unit's monitor certification requirements under 40 CFR § 96.270(b)(1), (2), or (5).
- (iii) A CAIR SO<sub>2</sub> allowance shall not be deducted, for compliance with the requirements of this permit, for a control period in a calendar year before the year for which the CAIR SO<sub>2</sub> allowance was allocated.
- (iv) CAIR SO<sub>2</sub> allowances shall be held in, deducted from, or transferred into or among CAIR SO<sub>2</sub> Allowance Tracking System accounts in accordance with the requirements of 40 CFR Part 96, Subpart FFF or Subpart GGG.
- (v) A CAIR SO<sub>2</sub> allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO<sub>2</sub> Trading Program. No provision of the CAIR SO<sub>2</sub> Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 40 CFR § 96.205 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.
- (vi) A CAIR SO<sub>2</sub> allowance does not constitute a property right.
- (vii) Upon recordation by the Administrator under 40 CFR Part 96, Subpart FFF or Subpart GGG, every allocation, transfer, or deduction of a CAIR SO<sub>2</sub> allowance to or from a CAIR SO<sub>2</sub> unit's compliance account is incorporated automatically in this CAIR permit.

F. SO<sub>2</sub> excess emissions requirements

- (i) If a CAIR SO<sub>2</sub> source emits sulfur dioxides during any control period in excess of the CAIR SO<sub>2</sub> emissions limitation, the owners and operators of the source and each CAIR SO<sub>2</sub> unit at the source shall surrender the CAIR SO<sub>2</sub> allowances required for deduction under 40 CFR § 96.254(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law.

- (ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AAA, the Clean Air Act, and applicable State law.

G. Recordkeeping and Reporting Requirements

- (i) Unless otherwise provided, the owners and operators of the CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source and the CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the permitting authority or the Administrator.
  - (1) The certificate of representation under 40 CFR §§ 96.113 and 96.213 for the CAIR NO<sub>x</sub> designated representative for the source and each CAIR NO<sub>x</sub> unit and the CAIR SO<sub>2</sub> designated representative for the source and each CAIR SO<sub>2</sub> unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5 year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR §§ 96.113 and 96.213 changing the CAIR designated representative.
  - (2) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HH and Subpart HHH, provided that to the extent that these subparts provide for a 3-year period for recordkeeping, the 3-year period shall apply.
  - (3) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO<sub>x</sub> Annual Trading Program and CAIR SO<sub>2</sub> Trading Program or relied upon for compliance determinations.
  - (4) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO<sub>x</sub> Annual Trading Program and CAIR SO<sub>2</sub> Trading Program or to demonstrate compliance with the requirements of the CAIR NO<sub>x</sub> Annual Trading Program and CAIR SO<sub>2</sub> Trading Program.
- (ii) The CAIR designated representative of a CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source and a CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall submit the reports required under the CAIR NO<sub>x</sub> Annual Trading Program and the CAIR SO<sub>2</sub> Trading

Program including those under 40 CFR Part 96, Subpart HH and Subpart HHH.

- H. The CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit shall meet the requirements of the CAIR NO<sub>x</sub> Annual Trading Program contained in 40 CFR Part 96, Subparts AA through II.
- I. The CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit shall meet the requirements of the CAIR SO<sub>2</sub> Trading Program contained in 40 CFR Part 96, Subparts AAA through III.
- J. Any provision of the CAIR NO<sub>x</sub> Annual Trading Program and the CAIR SO<sub>2</sub> Trading Program that applies to a CAIR NO<sub>x</sub> source or CAIR SO<sub>2</sub> source or the CAIR designated representative of a CAIR NO<sub>x</sub> source or CAIR SO<sub>2</sub> source shall also apply to the owners and operators of such source and the units at the source.
- K. Any provision of the CAIR NO<sub>x</sub> Annual Trading Program and the CAIR SO<sub>2</sub> Trading Program that applies to a CAIR NO<sub>x</sub> unit or CAIR SO<sub>2</sub> unit or the CAIR designated representative of a CAIR NO<sub>x</sub> unit or CAIR SO<sub>2</sub> unit shall also apply to the owners and operators of such unit.
- L. No provision of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR SO<sub>2</sub> Trading Program, a CAIR permit application, a CAIR permit, or an exemption under 40 CFR §§ 96.105 or 96.205 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO<sub>x</sub> source or CAIR NO<sub>x</sub> unit or a CAIR SO<sub>2</sub> source or CAIR SO<sub>2</sub> unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

### **Clean Air Interstate Rule Unit Exemptions**

- 23. As reference only information, unit DC-B1 (identified in the Certificate of Representation as Unit 1, for units exempted from the CAIR source) has received CAIR unit exemptions and is not incorporated into the CAIR Permit.

## **Attachments**

**Applicable Requirements Summary**

**Additional Monitoring Requirements**

**New Source Review Authorization References**

**Alternative Requirement**

### **Applicable Requirements Summary**

|                           |           |
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|  |           |
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Note: A “none” entry may be noted for some emission sources in this permit’s “Applicable Requirements Summary” under the heading of “Monitoring and Testing Requirements” and/or “Recordkeeping Requirements” and/or “Reporting Requirements.” Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.144), Reporting Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.



### Unit Summary

| Unit/Group/<br>Process ID No. | Unit Type   | Group/Inclusive<br>Units                               | SOP Index No. | Regulation                                      | Requirement Driver  |
|-------------------------------|---|--|---------------|---|---|
| DC-EDG                        | SRIC ENGINES  | N/A  | 63ZZZZ        | 40 CFR Part 63, Subpart<br>ZZZZ                 | No changing attributes.   |
| GRPPBR472                     | LOADING/UNLOADING                                       | DC-CTFODT, DC-<br>EDG12ST, DC-<br>UOST, DC-<br>VOCXFER | PBR472        | 30 TAC Chapter 106,<br>Permits by Rule          | No changing attributes.   |
| GRPTSTACKS                    | EMISSION<br>POINTS/STATIONARY<br>VENTS/PROCESS<br>VENTS | DC-CTS1, DC-CTS2,<br>DC-CTS3, DC-CTS4                  | R1111         | 30 TAC Chapter 111,<br>Visible Emissions        | No changing attributes.   |
| GRPTURBINE                    | STATIONARY<br>TURBINES                                  | DC-CT1, DC-CT2,<br>DC-CT3, DC-CT4                      | R7131         | 30 TAC Chapter 117,<br>Subchapter E, Division 1 | No changing attributes.   |
| GRPTURBINE                    | STATIONARY<br>TURBINES                                  | DC-CT1, DC-CT2,<br>DC-CT3, DC-CT4                      | 60GG-CFMS     | 40 CFR Part 60,<br>Subpart GG                   | FUEL SUPPLY = Stationary gas turbine is supplied its fuel without intermediate bulk storage., FUEL TYPE FIRED = Gaseous fuel other than natural gas., FUEL MONITORING SCHEDULE = Previously approved custom fuel monitoring schedule. |
| GRPTURBINE                    | STATIONARY<br>TURBINES                                  | DC-CT1, DC-CT2,<br>DC-CT3, DC-CT4                      | 60GG-LQD      | 40 CFR Part 60,<br>Subpart GG                   | MANUFACTURERS BASE LOAD = Base load is greater than 30 MW., FUEL SUPPLY = Stationary gas turbine is supplied its fuel from a bulk storage tank., FUEL TYPE FIRED = Liquid fuel  |

### Unit Summary

| Unit/Group/<br>Process ID No. | Unit Type              | Group/Inclusive<br>Units          | SOP Index No. | Regulation                    | Requirement Driver   |
|-------------------------------|------------------------|-----------------------------------|---------------|-------------------------------|--|
| GRPTURBINE                    | STATIONARY<br>TURBINES | DC-CT1, DC-CT2,<br>DC-CT3, DC-CT4 | 60GG-NG       | 40 CFR Part 60,<br>Subpart GG | MANUFACTUERS BASE LOAD<br>= Base load is greater than 30<br>MW., FUEL SUPPLY =<br>Stationary gas turbine is<br>supplied its fuel without<br>intermediate bulk storage., FUEL<br>TYPE FIRED = Natural gas<br>meeting the definition in §<br>60.331(u)., FUEL MONITORING<br>SCHEDULE = Fuel meets the<br>definition of natural gas in 40<br>CFR § 60.331(u) and is not<br>monitored. |

## Applicable Requirements Summary

| Unit Group Process ID No. | Unit Group Process Type | SOP Index No. | Pollutant   | State Rule or Federal Regulation Name | Emission Limitation, Standard or Equipment Specification Citation  | Textual Description (See Special Term and Condition 1.B.)   | Monitoring And Testing Requirements   | Recordkeeping Requirements<br>(30 TAC § 122.144)  | Reporting Requirements<br>(30 TAC § 122.145) |
|---------------------------|-------------------------|---------------|-------------|---------------------------------------|--|---|---|---|--|
| DC-EDG                    | EU                      | 63ZZZZ        | 112(B) HAPS | 40 CFR Part 63, Subpart ZZZZ          | § 63.6603(a)-Table2d.4<br>§ 63.6595(a)(1)<br>§ 63.6605(a)<br>§ 63.6605(b)<br>§ 63.6625(e)<br>§ 63.6625(h)<br>§ 63.6625(i)<br>§ 63.6640(b)<br>§ 63.6640(f)(1)<br>[G]§ 63.6640(f)(2)<br>[G]§ 63.6640(f)(4) | For each existing emergency stationary CI RICE and black start stationary CI RICE, located at an area source, you must comply with the requirements as specified in Table 2d.4.a-c.   | § 63.6625(f)<br>§ 63.6625(i)<br>§ 63.6640(a)<br>§ 63.6640(a)-Table6.9.a.i<br>§ 63.6640(a)-Table6.9.a.ii<br>§ 63.6640(b) | § 63.6625(i)<br>§ 63.6655(a)<br>§ 63.6655(a)(1)<br>§ 63.6655(d)<br>§ 63.6655(e)<br>§ 63.6655(f)<br>§ 63.6660(a)<br>§ 63.6660(b)<br>§ 63.6660(c) | § 63.6640(b)<br>§ 63.6640(e)<br>§ 63.6650(f) |
| GRPPBR472                 | EU                      | PBR472        | OPACITY     | 30 TAC Chapter 106, Permits by Rule   | [G]§ 106.472   | The unit is authorized by PBR 106.472 for Organic & Inorganic Liquid Loading & Unloading. The unit handles [fuel oil] liquids that are listed in 30 TAC §106.472(1) - (9) and that is [are] not capable of producing visible emissions during loading, unloading, or storage. | ** See Periodic Monitoring Summary  | [G]§ 106.8(c)   | None   |
| GRPPBR472                 | EU                      | PBR472        | VOC         | 30 TAC Chapter 106, Permits by Rule   | [G]§ 106.472<br>[G]§ 106.4   | The unit is authorized by PBR 106.472 for Organic & Inorganic Liquid Loading & Unloading. The unit handles [fuel oil] liquids that are listed in 30 TAC §106.472(1) - (9) and that is [are] not capable of producing visible emissions during loading, unloading, or storage. | None  | [G]§ 106.8(c)   | None   |

## Applicable Requirements Summary

| Unit Group Process ID No. | Unit Group Process Type | SOP Index No. | Pollutant       | State Rule or Federal Regulation Name        | Emission Limitation, Standard or Equipment Specification Citation | Textual Description (See Special Term and Condition 1.B.)   | Monitoring And Testing Requirements                           | Recordkeeping Requirements<br>(30 TAC § 122.144) | Reporting Requirements<br>(30 TAC § 122.145) |
|---------------------------|-------------------------|---------------|-----------------|--|---|---|---|--|--|
| GRPTSTACKS                | EP                      | R1111         | OPACITY         | 30 TAC Chapter 111, Visible Emissions        | § 111.111(a)(1)(C)<br>§ 111.111(a)(1)(E)                          | Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.  | [G]§ 111.111(a)(1)(F)<br>** See Periodic Monitoring Summary   | None   | None   |
| GRPTURBINE                | EU                      | R7131         | EXEMPT          | 30 TAC Chapter 117, Subchapter E, Division 1 | § 117.3003(2)<br>§ 117.3003                                       | The provisions of this division, except as specified in §117.3040 and §117.3045 of this title (relating to Continuous Demonstration of Compliance; and Notification, Recordkeeping, and Reporting Requirements), do not apply to stationary gas turbines which are used solely to power other units during startups or demonstrated to operate no more than an average of 10% of the hours of the year, averaged over the three most recent calendar years, and no more than 20% of the hours in a single calendar year | § 117.3040(i)   | None   | [G]§ 117.3040(j)                             |
| GRPTURBINE                | EU                      | 6oGG-CFMS     | SO <sub>2</sub> | 40 CFR Part 60, Subpart GG                   | § 60.333(b)   | No stationary gas turbine shall burn any fuel which contains sulfur in excess of 0.8% by weight.  | § 60.334(h)<br>§ 60.334(h)(4)<br>**See Alternative Monitoring | None   | None   |

## Applicable Requirements Summary

| Unit Group Process ID No. | Unit Group Process Type | SOP Index No. | Pollutant       | State Rule or Federal Regulation Name | Emission Limitation, Standard or Equipment Specification Citation | Textual Description (See Special Term and Condition 1.B.)  | Monitoring And Testing Requirements   | Recordkeeping Requirements<br>(30 TAC § 122.144) | Reporting Requirements<br>(30 TAC § 122.145)    |
|---------------------------|-------------------------|---------------|-----------------|---------------------------------------|---|--|---|--|---|
| GRPTURBINE                | EU                      | 6oGG-CFMS     | NO <sub>x</sub> | 40 CFR Part 60, Subpart GG            | § 60.332(a)(1)<br>§ 60.332(a)(3)<br>§ 60.332(f)<br>§ 60.332(i)    | No owner or operator shall discharge into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of the amount as determined from the specified equation. | § 60.334(a)<br>§ 60.334(g)<br>§ 60.334(j)<br>§ 60.334(j)(1)<br>[G]§ 60.334(j)(1)(i)<br>[G]§ 60.335(a)<br>§ 60.335(b)(1)<br>§ 60.335(b)(2)<br>§ 60.335(b)(4)<br>§ 60.335(c)(1)<br>** See CAM Summary | § 60.334(a)<br>§ 60.334(g)                       | § 60.334(j)<br>§ 60.334(j)(3)<br>§ 60.334(j)(5) |
| GRPTURBINE                | EU                      | 6oGG-LQD      | SO <sub>2</sub> | 40 CFR Part 60, Subpart GG            | § 60.333(b)   | No stationary gas turbine shall burn any fuel which contains sulfur in excess of 0.8% by weight.   | § 60.334(h)<br>§ 60.334(h)(1)<br>§ 60.334(i)<br>§ 60.334(i)(1)<br>§ 60.334(j)<br>§ 60.334(j)(2)(i)<br>§ 60.334(j)(2)(ii)<br>§ 60.335(b)(10)<br>§ 60.335(b)(10)(i)                                   | § 60.334(i)<br>§ 60.334(i)(1)                    | None  |
| GRPTURBINE                | EU                      | 6oGG-LQD      | NO <sub>x</sub> | 40 CFR Part 60, Subpart GG            | § 60.332(a)(1)<br>§ 60.332(a)(3)<br>§ 60.332(f)<br>§ 60.332(i)    | No owner or operator shall discharge into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of the amount as determined from the specified equation. | § 60.334(a)<br>§ 60.334(g)<br>§ 60.334(j)<br>§ 60.334(j)(1)<br>[G]§ 60.334(j)(1)(i)<br>[G]§ 60.335(a)<br>§ 60.335(b)(1)<br>§ 60.335(b)(2)<br>§ 60.335(b)(4)<br>§ 60.335(c)(1)<br>** See CAM Summary | § 60.334(a)<br>§ 60.334(g)                       | § 60.334(j)<br>§ 60.334(j)(3)<br>§ 60.334(j)(5) |
| GRPTURBINE                | EU                      | 6oGG-NG       | SO <sub>2</sub> | 40 CFR Part 60, Subpart GG            | § 60.333(b)   | No stationary gas turbine shall burn any fuel which contains sulfur in excess of 0.8% by weight.   | § 60.334(h)<br>[G]§ 60.334(h)(3)  | None   | None  |

## Applicable Requirements Summary

| Unit Group Process ID No. | Unit Group Process Type | SOP Index No. | Pollutant       | State Rule or Federal Regulation Name | Emission Limitation, Standard or Equipment Specification Citation | Textual Description (See Special Term and Condition 1.B.)  | Monitoring And Testing Requirements   | Recordkeeping Requirements<br>(30 TAC § 122.144) | Reporting Requirements<br>(30 TAC § 122.145)    |
|---------------------------|-------------------------|---------------|-----------------|---------------------------------------|---|--|---|--|---|
| GRPTURBINE                | EU                      | 6oGG-NG       | NO <sub>x</sub> | 40 CFR Part 60, Subpart GG            | § 60.332(a)(1)<br>§ 60.332(a)(3)<br>§ 60.332(f)<br>§ 60.332(i)    | No owner or operator shall discharge into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of the amount as determined from the specified equation. | § 60.334(a)<br>§ 60.334(g)<br>§ 60.334(j)<br>§ 60.334(j)(1)<br>[G]§ 60.334(j)(1)(i)<br>[G]§ 60.335(a)<br>§ 60.335(b)(1)<br>§ 60.335(b)(2)<br>§ 60.335(b)(4)<br>§ 60.335(c)(1)<br>** See CAM Summary | § 60.334(a)<br>§ 60.334(g)                       | § 60.334(j)<br>§ 60.334(j)(3)<br>§ 60.334(j)(5) |

**Additional Monitoring Requirements**

**Compliance Assurance Monitoring Summary .....30**

**Periodic Monitoring Summary..... 33**

## CAM Summary

| <b>Unit/Group/Process Information</b>   |   |
|---|---|
| ID No.: GRPTURBINE  |   |
| Control Device ID No.: SWIS   | Control Device Type: Steam/Water Injection System |
| <b>Applicable Regulatory Requirement</b>  |   |
| Name: 40 CFR Part 60, Subpart GG  | SOP Index No.: 6oGG-CFMS                          |
| Pollutant: NO <sub>x</sub>  | Main Standard: § 60.332(a)(1)                     |
| <b>Monitoring Information</b>   |   |
| Indicator: Fuel and water injection rates   |   |
| Minimum Frequency: Once per 15-minutes, according to 60.13(h)   |   |
| Averaging Period: Unit operating hour, according to 60.13(h)  |   |
| Deviation Limit: Water to Fuel Ratio < Acceptable Water to Fuel Ratio   |   |
| <p>CAM Text: For each combustion turbine, the permit holder shall monitor and record the fuel consumption, the water injection rate, the ratio of water to fuel being fired in the turbine, and the acceptable ratio of water to fuel according to the requirements of 60.13(h) and 60.334.</p> <p>Each fuel and water injection rate monitoring device shall be calibrated at least annually or at a frequency in accordance with the either manufacturer's specifications or other written procedures that provide an adequate assurance of compliance</p> <p>As required by 40 CFR § 64.3(b)(2), if the permit holder modifies existing monitoring equipment used for CAM purposes or installs new monitoring equipment used for CAM purposes, the permit holder will verify the operational status of the monitoring equipment based upon manufacturer's requirements or recommendations.</p> <p>Fuel and water injection rate monitoring devices shall be located to measure the amount of fuel and water injected into the combustor. The permit holder shall report a deviation for each unit operating hour for which the average water to fuel ratio falls below the acceptable water to fuel injection ratio.</p> |   |



## CAM Summary

| Unit/Group/Process Information  |   |
|---|---|
| ID No.: GRPTURBINE  |   |
| Control Device ID No.: SWIS   | Control Device Type: Steam/Water Injection System |
| Applicable Regulatory Requirement   |   |
| Name: 40 CFR Part 60, Subpart GG  | SOP Index No.: 6oGG-LQD                           |
| Pollutant: NO <sub>x</sub>  | Main Standard: § 60.332(a)(1)                     |
| Monitoring Information  |   |
| Indicator: Fuel and water injection rates   |   |
| Minimum Frequency: Once per 15-minutes, according to 60.13(h)   |   |
| Averaging Period: Unit operating hour, according to 60.13(h)  |   |
| Deviation Limit: Water to Fuel Ratio < Acceptable Water to Fuel Ratio   |   |
| <p>CAM Text: For each combustion turbine, the permit holder shall monitor and record the fuel consumption, the water injection rate, the ratio of water to fuel being fired in the turbine, and the acceptable ratio of water to fuel according to the requirements of 60.13(h) and 60.334.</p> <p>Each fuel and water injection rate monitoring device shall be calibrated at least annually or at a frequency in accordance with the either manufacturer's specifications or other written procedures that provide an adequate assurance of compliance</p> <p>As required by 40 CFR § 64.3(b)(2), if the permit holder modifies existing monitoring equipment used for CAM purposes or installs new monitoring equipment used for CAM purposes, the permit holder will verify the operational status of the monitoring equipment based upon manufacturer's requirements or recommendations.</p> <p>Fuel and water injection rate monitoring devices shall be located to measure the amount of fuel and water injected into the combustor. The permit holder shall report a deviation for each unit operating hour for which the average water to fuel ratio falls below the acceptable water to fuel injection ratio.</p> |   |

## CAM Summary

| Unit/Group/Process Information  |   |
|---|---|
| ID No.: GRPTURBINE  |   |
| Control Device ID No.: SWIS   | Control Device Type: Steam/Water Injection System |
| Applicable Regulatory Requirement   |   |
| Name: 40 CFR Part 60, Subpart GG  | SOP Index No.: 6oGG-NG                            |
| Pollutant: NO <sub>x</sub>  | Main Standard: § 60.332(a)(1)                     |
| Monitoring Information  |   |
| Indicator: Fuel and water injection rates   |   |
| Minimum Frequency: Once per 15-minutes, according to 60.13(h)   |   |
| Averaging Period: Unit operating hour, according to 60.13(h)  |   |
| Deviation Limit: Water to Fuel Ratio < Acceptable Water to Fuel Ratio   |   |
| <p>CAM Text: For each combustion turbine, the permit holder shall monitor and record the fuel consumption, the water injection rate, the ratio of water to fuel being fired in the turbine, and the acceptable ratio of water to fuel according to the requirements of 60.13(h) and 60.334.</p> <p>Each fuel and water injection rate monitoring device shall be calibrated at least annually or at a frequency in accordance with the either manufacturer's specifications or other written procedures that provide an adequate assurance of compliance</p> <p>As required by 40 CFR § 64.3(b)(2), if the permit holder modifies existing monitoring equipment used for CAM purposes or installs new monitoring equipment used for CAM purposes, the permit holder will verify the operational status of the monitoring equipment based upon manufacturer's requirements or recommendations.</p> <p>Fuel and water injection rate monitoring devices shall be located to measure the amount of fuel and water injected into the combustor. The permit holder shall report a deviation for each unit operating hour for which the average water to fuel ratio falls below the acceptable water to fuel injection ratio.</p> |   |

## Periodic Monitoring Summary

| Unit/Group/Process Information  |                             |
|---|-----------------------------|
| ID No.: GRPPBR472   |                             |
| Control Device ID No.: N/A  | Control Device Type: N/A    |
| Applicable Regulatory Requirement   |                             |
| Name: 30 TAC Chapter 106, Permits by Rule   | SOP Index No.: PBR472       |
| Pollutant: PM(OPACITY)  | Main Standard: [G]§ 106.472 |
| Monitoring Information  |                             |
| Indicator: Liquid type or visible emissions   |                             |
| Minimum Frequency: Monthly  |                             |
| Averaging Period: n/a   |                             |
| Deviation Limit: Liquid type or visible emissions   |                             |
| <p>Periodic Monitoring Text: The permit holder shall maintain monthly records of the type of liquid loaded, unloaded, or stored. If a liquid other than diesel fuel, gasoline, lubricating oil, gear oil, hydraulic oil, dust suppressant (surfactant), or antifreeze is loaded, unloaded, or stored, the permit holder shall either list this occurrence as a deviation according to 30 TAC §122.145 (Reporting Terms and Conditions) or conduct a monthly observation of the source during normal loading, unloading, or storage to determine if visible emissions are present. If an observation is conducted and visible emissions are present, the permit holder shall list this occurrence as a deviation according to 30 TAC §122.145.</p> |                             |

## Periodic Monitoring Summary

| Unit/Group/Process Information   |                                   |
|--|-----------------------------------|
| ID No.: GRPTSTACKS   |                                   |
| Control Device ID No.: N/A   | Control Device Type: N/A          |
| Applicable Regulatory Requirement  |                                   |
| Name: 30 TAC Chapter 111, Visible Emissions  | SOP Index No.: R1111              |
| Pollutant: OPACITY   | Main Standard: § 111.111(a)(1)(C) |
| Monitoring Information   |                                   |
| Indicator: Fuel Type   |                                   |
| Minimum Frequency: Annually or at any time a liquid fuel is used   |                                   |
| Averaging Period: n/a  |                                   |
| Deviation Limit: Maximum opacity = 15%   |                                   |
| <p>Periodic Monitoring Text: Record the type of fuel used by the unit. If a liquid fuel is fired, either alone or in combination with the specified gas, for a period greater than or equal to 24 consecutive hours it shall be considered and reported as a deviation or the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are observed. Any time a liquid fuel is fired for a period of greater than 7 consecutive days then visible emissions observations will be conducted no less than once per week. Documentation of all observations shall be maintained. If visible emissions are present during the firing of a liquid fuel, the permit holder shall either list this occurrence as a deviation or the permit holder may determine the opacity consistent with Test Method 9. Any opacity readings that are above the opacity limit from the underlying applicable requirement shall be reported as a deviation.</p> |                                   |

**New Source Review Authorization References**

**New Source Review Authorization References ..... 36**

**New Source Review Authorization References by Emission Unit..... 37**

## New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

| <b>Prevention of Significant Deterioration (PSD) Permits</b>  |                              |
|---|------------------------------|
| PSD Permit No.: PSDTX662M1  | Issuance Date: 07/28/2014    |
| <b>Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.</b> |                              |
| Authorization No.: 9664   | Issuance Date: 07/28/2014    |
| <b>Permits By Rule (30 TAC Chapter 106) for the Application Area</b>  |                              |
| Number: 106.227   | Version No./Date: 09/04/2000 |
| Number: 106.263   | Version No./Date: 11/01/2001 |
| Number: 106.412   | Version No./Date: 09/04/2000 |
| Number: 106.433   | Version No./Date: 09/04/2000 |
| Number: 106.452   | Version No./Date: 09/04/2000 |
| Number: 106.454   | Version No./Date: 11/01/2001 |
| Number: 106.472   | Version No./Date: 09/04/2000 |
| Number: 106.532   | Version No./Date: 09/04/2000 |
| Number: 53  | Version No./Date: 08/30/1988 |
| Number: 58  | Version No./Date: 05/12/1981 |

### New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

| Unit/Group/Process ID No. | Emission Unit Name/Description                  | New Source Review Authorization |
|---------------------------|---|---------------------------------|
| DC-CT1                    | COMBUSTION TURBINE 1                            | 9664, PSDTX662M1                |
| DC-CT2                    | COMBUSTION TURBINE 2                            | 9664, PSDTX662M1                |
| DC-CT3                    | COMBUSTION TURBINE 3                            | 9664, PSDTX662M1                |
| DC-CT4                    | COMBUSTION TURBINE 4                            | 9664, PSDTX662M1                |
| DC-CTFODT                 | CT DAY FUEL TANK                                | 106.472/09/04/2000              |
| DC-CTS1                   | COMBUSTION TURBINE 1 STACK                      | 9664, PSDTX662M1                |
| DC-CTS2                   | COMBUSTION TURBINE 2 STACK                      | 9664, PSDTX662M1                |
| DC-CTS3                   | COMBUSTION TURBINE 3 STACK                      | 9664, PSDTX662M1                |
| DC-CTS4                   | COMBUSTION TURBINE 4 STACK                      | 9664, PSDTX662M1                |
| DC-EDG12ST                | EMERGENCY DIESEL GENERATOR 1 AND 2 STORAGE TANK | 106.472/09/04/2000              |
| DC-EDG                    | CT EMERGENCY BLACKSTART DIESEL GENERATOR        | 9664                            |
| DC-UOST                   | USED OIL STORAGE TANK                           | 106.472/09/04/2000              |
| DC-VOCXFER                | LOADING AND UNLOADING OF NON-GASOLINE VOC       | 106.472/09/04/2000              |

**Alternative Requirement**

**Alternative Requirement ..... 39**





## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6

1445 ROSS AVENUE, SUITE 1200  
DALLAS, TEXAS 75202-2733

MAR 14 1990

Mr. Gerald R. Johnson  
TU Electric  
Skyway Tower  
400 N Olive St. L.B. 81  
Dallas, TX 75201

Re: Request for Custom Fuel Schedule DeCordova Combustion Turbine Project.

Dear Mr. Johnson:

This letter is in response to your November 28, 1989, letter to the Environmental Protection Agency (EPA) Region 6 office, containing your request under Title 40 CFR 60.334(b)(2) for a custom fuel sampling schedule for monitoring the sulfur and nitrogen content of a fuel supply line at the DeCordova Combustion Turbine Project.

The EPA approves custom fuel monitoring schedules after reviewing the sulfur analysis of a sufficient number of fuel samples to demonstrate the low sulfur content in the fuel. EPA has reviewed the fuel data received on August 14, 1989. EPA agrees that reduced monitoring of the fuel gas may be sufficient to ensure compliance with the Standards of Performance for Stationary Gas Turbines, 40 CFR 60, Subpart GG, based on the low sulfur content of the fuel. EPA therefore approves the custom fuel sampling schedule for the fuel supply line to the DeCordova Combustion Turbine Project. This custom schedule approved herein shall be in accordance with the conditions described in the Enclosure.

If you have any questions regarding this letter please call me or Ms. Celeste Steen of my staff at (214) 655-7229.

Sincerely yours,

A handwritten signature in cursive script, reading "John R. Hepola", is written over the typed name.

John R. Hepola  
Chief  
Air Enforcement Branch (6T-2)

cc: Dave Hendrix w/o att.  
Texas Air Control Board

TU ELECTRIC

MAR 15 1990

ENVIRONMENTAL  
SERVICES

## Enclosure

## Conditions for Custom Fuel Sampling Schedule for Stationary Gas Turbines

1. Monitoring of Fuel nitrogen content shall not be required while natural gas is the only fuel fired in the gas turbine.
2. Sulfur Monitoring
  - a. Analysis for fuel sulfur content of the natural gas shall be conducted using one of the approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternative method. The reference methods are: ASTM D1072-80; ASTM D3031-81; ASTM D3246-81; and ASTM D4084-82 as referenced in 40 CFR 60.335 (b)(2).
  - b. Effective the date of this custom schedule, sulfur monitoring shall be conducted twice monthly for six months. If this monitoring shows little variability in the fuel sulfur content, and indicates consistent compliance with 40 CFR 60.333, then sulfur monitoring shall be conducted once per quarter for six quarters.
  - c. If after the monitoring required in item 2(b) above, or herein, the sulfur content of the fuel shows little variability and, calculated as sulfur dioxide, represents consistent compliance with the sulfur dioxide emission limits specified under 40 CFR 60.333, sample analysis shall be conducted twice per annum. This monitoring shall be conducted during the first and third quarters of each calendar year.
  - d. Should any sulfur analysis as required in items 2(b) or 2(c) above indicate noncompliance with 40 CFR 60.333, the owner or operator shall notify the Texas Air Control Board (TACB) of such excess emissions and the custom schedule shall be re-examined by the Environmental Protection Agency. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.
3. If there is a change in fuel supply, the owner or operator must notify the TACB of such change for re-examination of this custom schedule. A substantial change in fuel quality shall be considered as a change in fuel supply. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.
4. Records of sample analysis and fuel supply pertinent to this custom schedule shall be retained for a period of three years, and be available for inspection by personnel of federal, state, and local air pollution control agencies.

**Appendix A**

**Acronym List ..... 42**

## Acronym List

The following abbreviations or acronyms may be used in this permit:

|                        |   |
|------------------------|---|
| ACFM .....             | actual cubic feet per minute                      |
| AMOC .....             | alternate means of control                        |
| ARP .....              | Acid Rain Program                                 |
| ASTM .....             | American Society of Testing and Materials         |
| B/PA .....             | Beaumont/Port Arthur (nonattainment area)         |
| CAM .....              | Compliance Assurance Monitoring                   |
| CD .....               | control device                                    |
| COMS .....             | continuous opacity monitoring system              |
| CVS .....              | closed-vent system                                |
| D/FW .....             | Dallas/Fort Worth (nonattainment area)            |
| DR .....               | Designated Representative                         |
| ELP .....              | El Paso (nonattainment area)                      |
| EP .....               | emission point                                    |
| EPA .....              | U.S. Environmental Protection Agency              |
| EU .....               | emission unit                                     |
| FCAA Amendments .....  | Federal Clean Air Act Amendments                  |
| FOP .....              | federal operating permit                          |
| GF .....               | grandfathered                                     |
| gr/100 scf .....       | grains per 100 standard cubic feet                |
| HAP .....              | hazardous air pollutant                           |
| H/G/B .....            | Houston/Galveston/Brazoria (nonattainment area)   |
| H <sub>2</sub> S ..... | hydrogen sulfide                                  |
| ID No. ....            | identification number                             |
| lb/hr .....            | pound(s) per hour                                 |
| MMBtu/hr .....         | Million British thermal units per hour            |
| MRRT .....             | monitoring, recordkeeping, reporting, and testing |
| NA .....               | nonattainment                                     |
| N/A .....              | not applicable                                    |
| NADB .....             | National Allowance Data Base                      |
| NO <sub>x</sub> .....  | nitrogen oxides                                   |
| NSPS .....             | New Source Performance Standard (40 CFR Part 60)  |
| NSR .....              | New Source Review                                 |
| ORIS .....             | Office of Regulatory Information Systems          |
| Pb .....               | lead  |
| PBR .....              | Permit By Rule                                    |
| PM .....               | particulate matter                                |
| ppmv .....             | parts per million by volume                       |
| PSD .....              | prevention of significant deterioration           |
| RO .....               | Responsible Official                              |
| SO <sub>2</sub> .....  | sulfur dioxide                                    |
| TCEQ .....             | Texas Commission on Environmental Quality         |
| TSP .....              | total suspended particulate                       |
| TVP .....              | true vapor pressure                               |
| U.S.C. ....            | United States Code                                |
| VOC .....              | volatile organic compound                         |